

# **NEW YORK GAS GROUP**

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> St. Lawrence Gas Company, Inc.

Ms. Stacey Gerard
Acting Associate Administrator
US Department of Transportation
Office of Pipeline Safety
400 7<sup>th</sup> Street S.W.
Washington, DC 20590

Dear Ms. Gerard:

The New York Gas Group (NYGAS), the trade association for the local gas distribution companies (LDCs) in New York State, expresses its appreciation for the opportunity to provide comments to the DOT as the Proposed Pipeline Integrity Rulemaking for Gas Operators is formulated. We strongly urge that DOT consider these comments, as we believe that these suggestions will serve to enhance the underlying objective of the Rulemaking, ie, protect the public and the environment from gas pipeline facility failures.

In order to mitigate the failure of LDC transmission systems, New York State endorses a broad-based approach to comprehensively analyze all available information about the pipeline and consequences of failure. NYGAS, along with staff from the NYS Department of Public Service, has been engaged in developing a pipeline integrity risk assessment tool to ensure the integrity of the LDC transmission system.

## **INGAA's Approach**

INGAA has been providing information to DOT regarding a pipeline assessment option called Direct Assessment (DA) to be used as an alternative to in-line pigging or hydrostatic testing. DA uses annual cathodic protection testing data, close interval survey data, and specialized holiday testing (PCM, c-spin, DCVG, etc.) to determine high-risk areas of the pipeline that may need further investigation. At this time, NYGAS is carefully evaluating DA to determine if it could be integrated with NYGAS' proposed pipeline integrity management approach. While presently our understanding of DA is limited, it appears that it may be very suitable to larger interstate pipeline transmission systems, but may not be suitable (as a stand alone option) for LDC transmission pipeline systems.

### **Differences Between LDC and Interstate Pipeline Transmission Systems**

The attributes of the LDC transmission pipeline systems are very different from the attributes of the high-pressure, long distance interstate pipeline companies. For example,

- Compared to the interstate pipelines, LDC transmission pipelines operate at relatively low stress levels (50% SMYS maximum, with most at less than 30% of SMYS).
- Many miles of interstate pipelines are located in areas that are not congested, as opposed to the LDC transmission lines that are usually found in more congested areas.
- The LDC systems contain many impediments to the use of in-line inspection tools and hydrostatic testing, which cause these practices to be impractical and cost prohibitive for LDCs, in most cases:
  - Outage times: Unlike the interstate companies that can tolerate lines out-ofservice (eg, they often have alternate pipeline routes), LDC systems represent a sole supply source and would suffer unacceptable consequences of widespread service interruptions. In addition, a number of large volume customers are often fed directly off the LDC transmission system.
  - Restrictions to in-line inspection tools: Most LDC systems were constructed in narrow rights-of-way or in public streets with minimum clearances to many subsurface facilities. LDC pipelines typically utilize standard radius elbows, tees, plug valves and other internal restrictions that are barriers to in-line inspection tools. Moreover, there is a lack of launching and receiving facilities and space to install them.
  - Restrictions to hydrostatic testing: Unlike the interstate companies, the LDC transmission pipeline systems typically feed a dense distribution grid, which makes isolating the line for hydrostatic testing extremely difficult. Cutting the line to isolate it, with later piecing-in, creates additional welds and stress points in the line.

Due in part to these differences, pipeline integrity management approaches for the LDCs and interstate companies are different.

#### **NYGAS' Approach**

Because the location of their transmission pipelines is predominantly in more urban and/or suburban areas as compared to interstate pipelines, the factors affecting the risk of failure for pipelines operated by LDCs will be different. Our position is that an LDC risk assessment evaluation program to ensure pipeline integrity must incorporate all failure mechanisms that could affect pipelines (not just external corrosion, which is the

mechanism focused on with DA). NYGAS is developing such a program that incorporates this approach. (Other LDCs may have similar programs.) The NYGAS program looks at four modes of failure that are important to LDC pipelines in New York State: External corrosion; material flaws; third party damage; and outside force. We believe this approach may complement DA in that it considers corrosion data along with other factors that influence pipeline failure, most notably, third party damage, which historically results in far more incidents than corrosion for the LDC pipeline systems.

Kiefner & Associates, Inc. is the architect behind NYGAS' risk assessment program which evaluates the relative risk between transmission pipeline segments. Inputs to this program evaluate considerably more variables than DA. Such variables include: Pipe diameter, wall thickness, %SMYS, maximum operating pressure, hydrostatic test pressure, year installed, depth of burial, weld quality, year cathodic protection installed, year of last close interval survey, cathodic protection effectiveness, coating type, coating condition, patrolling policy, slope factors (eg, angle of slope, soil type, direction of movement), flood factors (eg, type of crossing, buoyancy effects, tidal and current effects), earthquake and subsidence factors, ROW factors (eg, encroachment of other facilities, one call and public education policies, mapping, locating and marking procedures) etc.

The pipeline integrity approach that NYGAS proposes consists of using a pipeline risk assessment tool (eg, such as that being developed by Kiefner & Associates for NYGAS). The NYGAS-Kiefner model would be used to rank segments of affected pipelines by relative risk. (This would include pipelines operating at 30% or greater SMYS in High Consequence Areas, or whatever criteria are finally adopted by DOT.) This approach will identify the pipeline segments having the highest risk due to multiple failure mechanisms, in addition to corrosion. The program evaluates a variety of remedial actions for those segments that are identified to have the greatest risk of failure in order that the best remedial measure with the greatest value is implemented. Remedial actions include smart pigging, hydrostatic testing, DA, enhanced patrolling and monitoring, slope and water crossing monitoring, pipeline rebuilding, recoating, enhanced one call efforts, etc. The program does not preclude the use of new mitigative technologies that may become available to the LDCs in the future and does not confine the companies to the use of only one mitigative technique (which may not always be the most practical, economic, or effective technique to employ).

### **Closing Comments**

As pointed out, the pipeline systems operated by the LDCs can and frequently are very different than those operated by the interstate pipeline companies. Therefore, the pipeline integrity management solutions will be different for the two types of transmission systems. With this in mind, NYGAS suggests that the DOT consider meeting separately with the LDCs. By doing so, the DOT can acquire the input and expertise of the LDCs and explore the issues that are relevant to the LDCs specifically.

NYGAS' risk assessment approach addresses higher risk and more vulnerable pipeline segments and considers the use of remediation tools presently available, as well as those that may become available in the future. We strongly believe that this approach will offer an effective solution to the concerns as stipulated in the proposed Rulemakings.

Again, we appreciate the opportunity to submit this letter to you. Please feel free to contact me if you would like to discuss any of these comments further.

Sincerely,

Lawrence A. Giermek

Larry Gurnek / Day

Chairman, NYGAS Gas Operations Advisory Committee

cc: John Gawronski

Beth Callsen Mike Israni